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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,606	03/11/2004	Masato Kurokawa	042190	3867

38834 7590 11/29/2005

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EXAMINER

GUDIBANDE, SATYANARAYAN R

ART UNIT PAPER NUMBER

1654

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,606

Applicant(s)

KUROKAWA ET AL.

Examiner

Satyanarayana R. Gudibande

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/13/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group I invention of claims 1-7, election of peptide species Arg-Gly-Asp sequence (1), election of (Gly-Ala-Gly-Ala-Gly-Ser)_b as auxiliary amino acid sequence (Y) and election of polyalkylenepolyamine as a matrix in the reply filed on October 7, 2005 is acknowledged.

Claim 8 has been withdrawn from further consideration as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 ARE rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,184,348 B1 issued to Ferrari, et al., in view of Hahnle, patent application WO 02/26872 A1 (US 6,828,354 B2 patent corresponding to the WO 02/26872 A1 is cited as the English equivalent).

In the instant application, applicants claim a wound dressing composition for accelerated epidermal regeneration which comprises of a polypeptide (P) of having at least one species of epidermal regeneration-accelerating minimal amino acid sequence (X) for e.g., Arg-Gly-Asp (RGD) sequence; an auxiliary amino acid sequence (Y) for e.g., Gly-Ala-Gly-Ala-Gly-Ser (GAGAGS) and a polyalkylenepolyamine or a polyarylenepolyamine matrix.

Ferrari, et al., discloses the composition of the peptide copolymer of RGD and GAGAGS peptides in claims 4-6 of US 6,184,348 B1 (column 141, lines 8-29). The reference also teaches that the aforementioned copolymers can be deposited onto other substrates and materials for a cell-binding surface. Such coated materials or substrates are used for wound dressing that promotes enhanced healing (Column 28, lines 35-45). The reference of Ferrari, does not teach the use of polyalkylenepolyamine or polyarylenepolyamine matrices.

Hahnle, et al., (US 6,828,354 B2) teaches the use of polyalkylenepolyamines (column 8, lines 29-33) in the preparation of a hydrophilic open-celled resilient foam that could be used as matrix for making articles that could be used in wound dressings (claims 8, 15 and 18).

Applicants claim a matrix of polyalkylenepolyamine coated with a copolymer of peptides RGD and GAGAGS amino acid sequences for wound dressing that accelerates epidermal regeneration. Ferrari, teaches the composition of the peptide that can be used as a coating on materials or substrates used for wound dressing. Hahnle, teaches the preparation of a hydrophilic

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foam matrix made of polyalkylenepolyamine that can be used for wound dressing applications.

The motivation to combine teachings of Ferrari and Hahnle was available in Ferrari as the reference teaches that the peptide composition may be coated on a matrix of woven fabric or film or membrane and used as wound dressing to promote enhanced healing due to attachment of cells involved in the healing. There would have been reasonable expectation of success in the present instance to combine the teachings of Ferrari and Hahnle to formulate a wound dressing composition for rapid epidermal regeneration. Therefore, the invention as a whole is clearly a prima-facie obvious to one skilled in the art at the time the invention was made to combine the teachings of Ferrari and Hahnle to formulate a wound dressing composition.

Conclusion

Claims 1-7 are rejected.

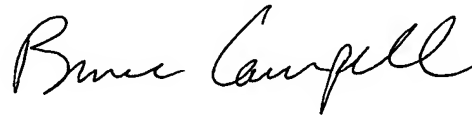
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satyanarayana R. Gudibande whose telephone number is 571-272-8146. The examiner can normally be reached on M-F 8-4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satyanarayana R. Gudibande, Ph.D.
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A handwritten signature in cursive script that reads "Bruce Campell".

**BRUCE R. CAMPPELL, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600**